OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG233212

DEPDC5 (NM_001242897) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEPDC5 (NM_001242897) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DEPDC5
Synonyms:	DEP.5; FFEVF; FFEVF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG233212 representing NM_001242897
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGAACAACAAAGGTCTACAAACTCGTCATCCACAAGAAGGGCTTTGGGGGCAGTGATGATGAGCTAG
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GCCTGGAGAAGATGCATGCCAGTGCCCCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG233212 representing NM_001242897
Red=Cloning site Green=Tags(s)

MRTTKVYKLVIHKKGFGGSDDELVVNPKVFPHIKLGDIVEIAHPNDEYSPLLLQVKSLKEDLQKETISVD
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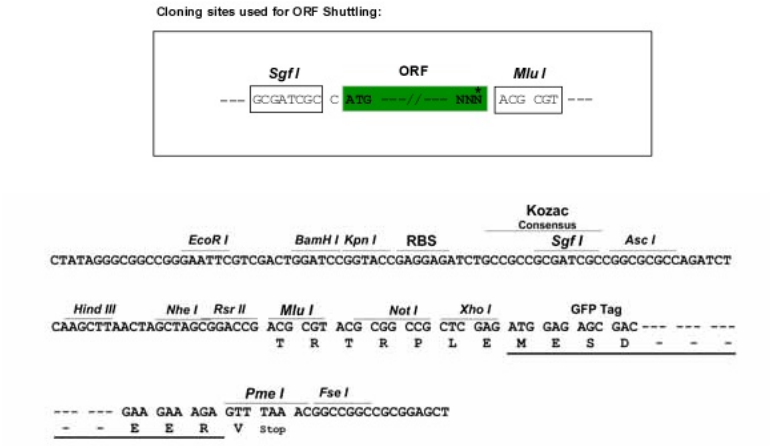
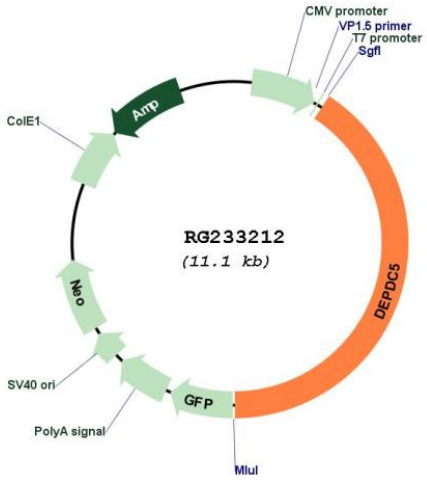
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001242897
ORF Size:	4509 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001242897.2
RefSeq Size:	5155 bp
RefSeq ORF:	4512 bp
Locus ID:	9681
UniProt ID:	O75140
Cytogenetics:	22q12.2-q12.3
Gene Summary:	This gene encodes a member of the IML1 family of proteins involved in G-protein signaling pathways. The mechanistic target of rapamycin complex 1 (mTORC1) pathway regulates cell growth by sensing the availability of nutrients. The protein encoded by this gene is a component of the GATOR1 (GAP activity toward Rags) complex which inhibits the amino acid-sensing branch of the mTORC1 pathway. Mutations in this gene are associated with autosomal dominant familial focal epilepsy with variable foci. A single nucleotide polymorphism in an intron of this gene has been associated with an increased risk of hepatocellular carcinoma in individuals with chronic hepatitis C virus infection. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]